03040205-06

(Black River)

General Description

Watershed 03040205-06 (formerly 03040205-100, and a portion of 03040205-070) is located in Lee, Sumter, Clarendon, and Williamsburg Counties and consists primarily of the *Black River* and its tributaries from Scape Ore Swamp to Pudding Swamp. The watershed occupies 84,708 acres of the Upper and Lower Coastal Plain regions of South Carolina. Land use/land cover in the watershed includes: 34.8% forested wetland, 33.4% agricultural land, 23.7% forested land, 4.1% urban land, 3.6% scrub/shrub land, 0.3% nonforested wetland, and 0.1% water.

This upper section of the Black River accepts drainage from its upstream reach together with the Scape Ore Swamp Watershed, Mill Branch, Tearcoat Branch (Davis Branch, Pen Branch), Breakfast Branch (Crow Bay), the Pocotaligo River Watershed, Broad Branch, another Mill Branch (Conyers Bay), and another Mill Branch. The river flows through the Black River Swamp throughout the watershed. There are a total of 190.7 stream miles and 122.9 acres of lake waters in this watershed. The Black River is classified FW* (Dissolved oxygen not less than 4.0 mg/l and pH between 5.0 and 8.0) and the remaining streams are classified FW.

Surface Water Quality

Station #	Type	Class	<u>Description</u>
RS-02477	RS02	FW	TEARCOAT BRANCH AT S-14-50
PD-116	S/INT	FW*	BLACK RIVER AT S-14-40 E OF MANNING
PD-227	P/INT	FW*	BLACK RIVER AT S-45-35 8.6 MI NW OF KINGSTREE

Tearcoat Branch (**RS-02477**) - This is a blackwater system, characterized by naturally low pH and dissolved oxygen concentration conditions. Although pH and dissolved oxygen excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. Aquatic life and recreational uses are fully supported. DDE was detected in the 2002 sediment sample. Although the use of DDT was banned in 1973, it is very persistent in the environment.

Black River - There are two SCDHEC monitoring sites along this section of the Black River. At the upstream site (PD-116), aquatic life uses are partially supported due to dissolved oxygen excursions, which are compounded by a significant decreasing trend in dissolved oxygen concentration. There is a significant decreasing trend in pH. A significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter. Recreational uses are fully supported at this site. Aquatic life and recreational uses are fully supported at the downstream site (PD-227); however, there is a significant increasing trend in total phosphorus concentration. A significant decreasing trend in five-day biological oxygen demand suggests improving conditions for this parameter.

A fish consumption advisory has been issued by the Department for mercury and includes the **Black River** within this watershed (see advisory p.72).

NPDES Program

Active NPDES Facilities

RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD)

TYPE COMMENT

NPDES#

BROAD BRANCH

L. DEAN WEAVER CONSTR./SC RD 1450 PIT

PIPE #: 001 FLOW: M/R

SCG730684 MINOR INDUSTRIAL

Growth Potential

There is a low potential for growth in this watershed. There is no existing water or sewer infrastructure in the watershed. Some growth may occur surrounding the I-95 Interchanges and the U.S. Hwy 378 corridor. The remainder of the watershed is rural with agricultural and timberland uses.